

REMARKS

In this amendment, claim 16 is amended. Claims 1, 3, 6-16, 18 and 21-30 are pending. Reconsideration of this application, as amended, is requested.

This paper is in response to the final Office Action dated April 16, 2007 and the Advisory Action dated July 5, 2007.

103 Rejections

Claims 1, 3, 6-16, 18 and 21-30 remain rejected under 35 U.S.C. 103(a) as unpatentable over Feldman and Gilmartin, with or without Hedenmo et al. or Karube et al. Claims 1, 3, 10, 12, 13, 15 and 29 remain rejected as unpatentable over Hughes in view of Gilmartin with Karube, and alternately in further view of Feldman with Hedenmo. Applicants disagree with both of these.

The cited references have been discussed in previous papers. Those arguments continue to apply, although not repeated herein. In summary however, both Feldman and Hughes, the base references for the rejections, provide an enzyme and a mediator in the top of the working electrode. Feldman discloses the chemical binding of the enzyme and mediator to the surface of the electrode. The enzyme and mediator are not incorporated in the track, instead, are on the surface of the electrode. Hughes teaches screen printing of working ink containing enzyme and mediator along with stabilizers on an existing conducting track and electrode. Hughes does not teach incorporating the chemistry in the conducting track.

In neither of these base references is there even a suggestion that the enzyme and mediator can be incorporated into a conducting track to provide a suitable electrode and conductive track. The Office Action turns to Gilmartin for this supposed teaching.

However, in Gilmartin, the enzyme, intimately mixed with the conductive material, generates hydrogen peroxide, which is then electrochemically oxidized at the electrode surface facilitated by the metallo macrocyclic compound. From the hydrogen peroxide, electrons are transferred to the mediator. Gilmartin requires the metallo macrocyclic compound in order to obtain electron transfer from the enzyme to the mediator.

There is no teaching or suggestion in Gilmartin that a direct transfer of electrons from the enzyme to the mediator could be accomplished if having the enzyme and mediator intimately

mixed with the conducting material, as in the pending claims. There is no suggestion in Gilmartin, nor in Feldman nor Hughes, that the enzyme and mediator would continue to work as needed if incorporated into the conducting track by direct interaction between the enzyme and the mediator.

As discussed before, the secondary references of Hedenmo and Karube discuss the transfer of electrodes from an enzyme to the mediator to the electrode, but there is no suggestion that such a transfer would occur when the enzyme and mediator are present and mixed in with the conductive material.

At least for these reasons, the combination of Feldman with Gilmartin, Hedenmo and Karube, and Hughes with Gilmartin and Hedenmo and Hughes with Feldman and Karube, do not teach or suggest the biosensors of the pending claims. Withdrawal of the rejections is requested.

Summary

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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_____/Mara E. DeBoe/
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